



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/627,539	07/25/2003	Carl James Davis	18858	3681

23556 7590 11/30/2005

KIMBERLY-CLARK WORLDWIDE, INC.  
401 NORTH LAKE STREET  
NEENAH, WI 54956

EXAMINER
----------

OSELE, MARK A

ART UNIT	PAPER NUMBER
----------	--------------

1734

DATE MAILED: 11/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/627,539

**Applicant(s)**

DAVIS ET AL.

**Examiner**

Mark A. Osele

**Art Unit**

1734

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5, 8-14, 17-21, and 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kallner in view of Bradshaw et al. Kallner shows a heat sealing device comprising a thermally conductive heat sealing disk, 100, mounted for rotation about an axis, 20; and a heating element, 120, for heating an inner portion of the disk to cause thermal conductions towards the periphery of the disk. Kallner fails to show the disk used to engage with the outer surface of the tail on a roll of sheet material to weld the tail to the underlying layer. Although the article of Kallner is not a roll of sheet material, materials worked upon are not given patentable weight in an apparatus claim as long as the apparatus is capable of working upon that article. If the unevenly shaped load, L, of Kallner were replaced with a roll and wrapped with overlapping film layers for protection during shipping or storage, the apparatus of Kallner would heat seal the outer surface of the trailing sheet tail on the roll to weld it to the underlying layer of sheet material. The resilient support means for the disks allows for sealing of either unevenly shaped or uniformly shaped loads. Kallner fails to show the heating element causing

Art Unit: 1734

thermal conduction radially through the disk toward an outer portion of the disk and towards an outer peripheral surface thereof.

Bradshaw et al. shows a heat sealing disk wherein the heater, 10, is in the interior portion of the disk and heat is conducted radially through the disk toward the periphery of the disk. It would have been obvious to one of ordinary skill in the art at the time the invention was made to place the heater of Kallner in the interior of the roller such as shown by Bradshaw et al. because the two designs are shown to be functionally equivalent alternate expedients.

Regarding claims 8, 17, and 23, Kallner shows the disk to be supported on resilient support means (column 3, lines 33-36; column 4, lines 22-28).

Regarding claims 9 and 18, it is well known to make resilient supports adjustable to compensate for variation in springs or materials worked upon. It would have been obvious to one of ordinary skill in the art at the time the invention was made to add adjustment means to the resilient supports so they could be adjusted as springs are replaced or materials of different sizes are worked upon.

Regarding claims 10 and 24, Kallner shows the temperature of the sealing disk to be controlled using a thermocouple (column 4, lines 10-15).

Regarding claims 11 and 26, it is conventional to control the movement of articles to be worked upon into and out of the work station. It would have been obvious to one of ordinary skill in the art at the time the invention was made to control the movement of the articles into and out of the work station for automation purposes which speeds throughput and increases productivity.

Art Unit: 1734

Regarding claim 25, Kallner shows conveyors for moving the rolls past the sealing device (column 1, lines 15-18).

3. Claims 6-7, 15-16, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kallner in view of Bradshaw et al. as applied to claims 1, 12, and 19 above and further in view in view of Herrington. Kallner fails to show a tapered roller with teeth around the periphery. Herrington shows a heated sealing disk wherein the periphery of the disk, 59, comprises a series of tapered teeth, 59a. It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the periphery of the disk of the references as combined with tapered teeth because Herrington shows this type of roller is effective in sealing two webs together when a tearable seal is desired for easy opening.

### ***Response to Arguments***

4. Applicant's arguments filed September 15, 2005 have been fully considered but they are not persuasive. Applicants' arguments directed to the location of the heating element in Kallner are moot in view of the modified combination of references.

Regarding the argument to the rejection of claim 25, the prior office action inadvertently referred to Weiss et al. This has been corrected and the current rejection also now includes the appropriate column and line number where the features of claim 25 are shown.

Applicants' arguments directed to the combination of Kallner in view of Bradshaw et al. are not persuasive. The applicants contend that the different functions described by Kallner and Bradshaw et al. indicate that the two heated rollers are not functional equivalents. The rollers of both Kallner and Bradshaw et al. are rotary sealing rollers with a heated peripheral region moving along the materials to be sealed. Sealing different materials is not sufficient evidence that the two rollers are not functional equivalents.

Applicants' argues that one of ordinary skill in the art would not modify Kallner in view of Herrington because Kallner is directed to a permanent seal using transversely movable sealing rollers while Herrington uses sealing rollers that create an intermittent bond for a tearable seal. The examiner believes the two teachings are not contradictory. One of ordinary skill in the art desiring a tearable seal would still want that seal to traverse the entire joined area, not have large gaps between sealed areas.

### ***Conclusion***

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not


Art Unit: 1734

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark A. Osele whose telephone number is 571-272-1235. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Fiorilla can be reached on 571-272-1187. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
MARK A. OSELE  
PRIMARY EXAMINER

November 27, 2005